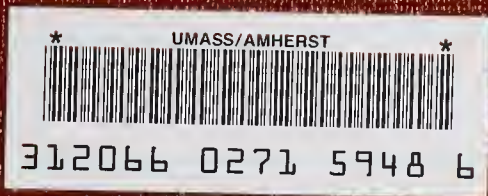
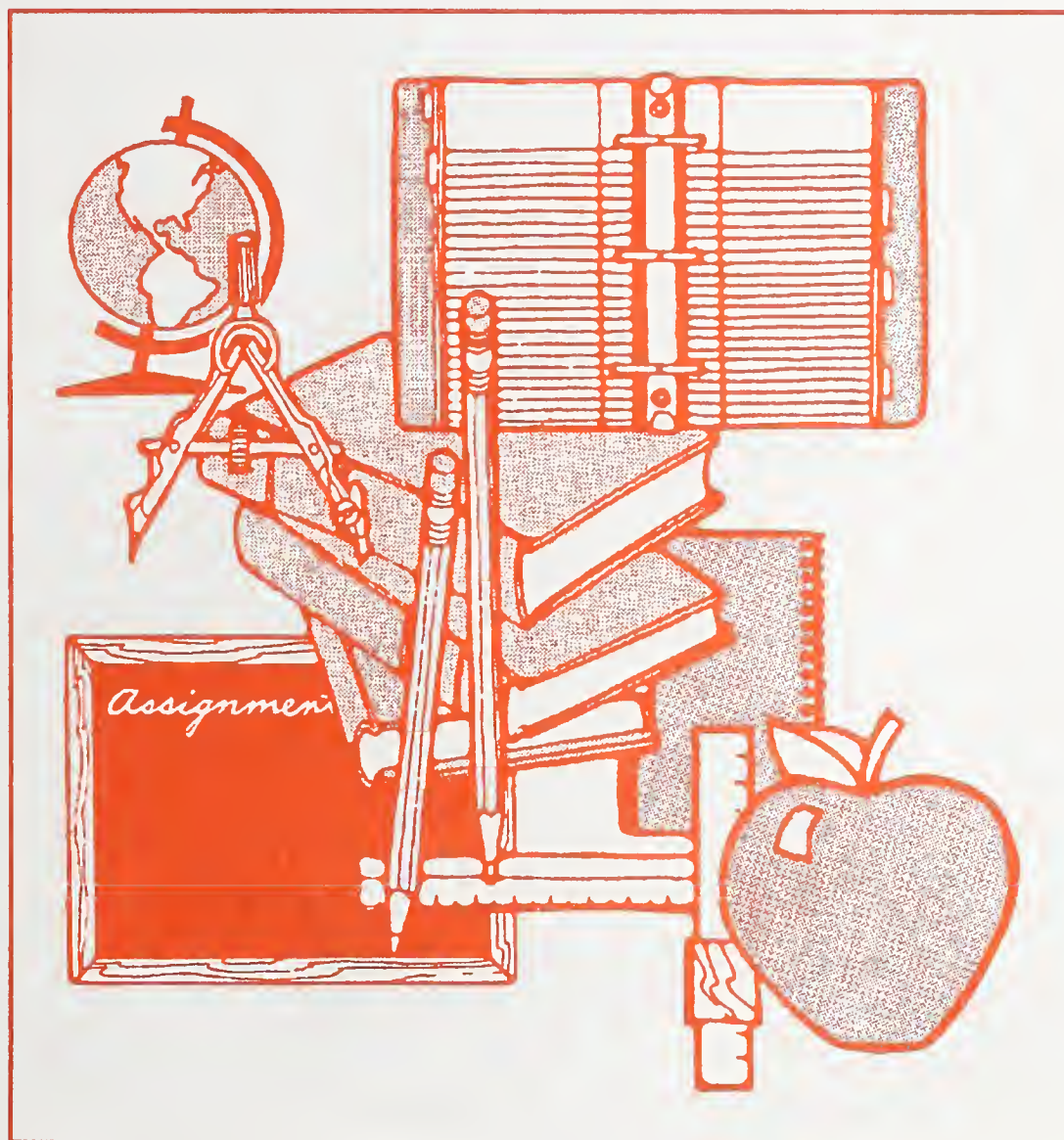


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Massachusetts Basic Skills Tests: 1990 RESULTS



Massachusetts Department of Education

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March 1991

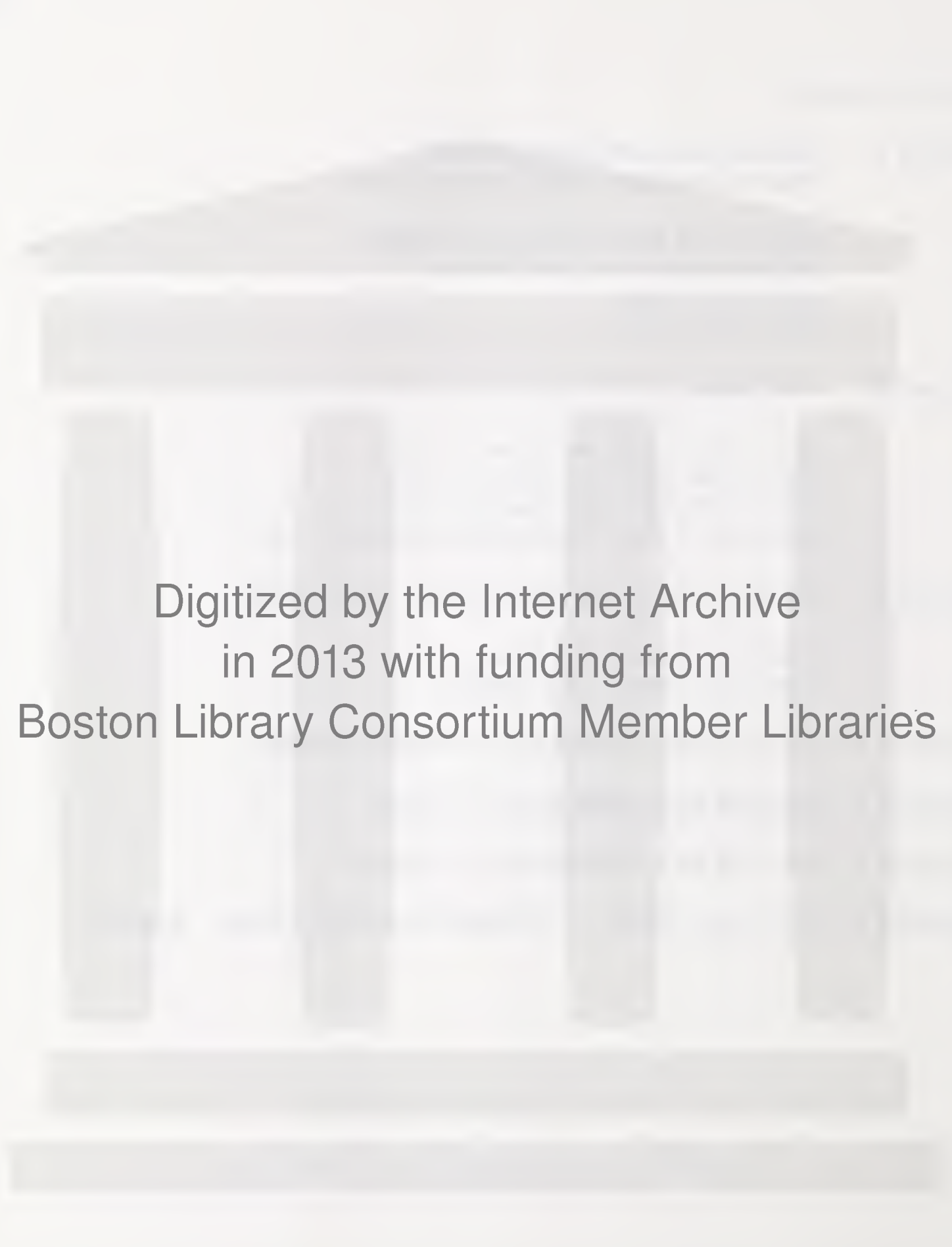
Massachusetts Basic Skills Tests:

1990 RESULTS

Massachusetts Department of Education

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Executive Summary

The 1990 report of the Basic Skills Testing Program, authorized under Chapter 188 of the Acts of 1985, summarizes the test performance of all third, sixth and ninth grade students tested in reading, mathematics and writing. It also includes the test results for students in grades 10, 11 and 12 who had not previously met the Basic Skills standards. The report provides a four-year summary of test results and an examination of major trends during this period.

The purpose of Basic Skills Testing is to identify students who have not mastered basic skills. In 1990, about 170,000 elementary and secondary students, representing 91 percent of the total enrollment in grades 3, 6 and 9, were eligible for testing during October 1990. The percentages of students who met or exceeded the standards of 65% correct in reading and mathematics and the required levels of proficiency in writing are summarized below:

	Reading	Mathematics	Writing
Grade 3	94.4%	92.1%	92.3%
Grade 6	94.4%	92.6%	93.8%
Grade 9	85.9%	87.1%	87.8%

In all but two instances, these passing rates represent a slight decrease compared to 1989 figures. In addition, the percentages of eligible students passing all three Basic Skills tests decreased between 1989 and 1990 at all grade levels. However, despite the one-year decline, results over the four-year testing period, with few exceptions, show modest improvement in all subjects and at all grade levels, and, as displayed below, in the percentage of students passing all tests.

	1987	1988	1989	1990
Grade 3	85.3%	87.6%	87.7%	85.3%
Grade 6	79.1%	82.8%	84.2%	83.9%
Grade 9	76.3%	78.6%	81.8%	78.9%

Overall, 29,264 students, representing 17% of those tested, did not pass one or more tests in 1990. In 1987, the figure was 20%, in 1988, 17%, and, in 1989, 15%. Generally, the number and percentage of students not passing one or more tests is smaller than in 1987.

The regulations governing the testing program require that secondary students who have not previously met Basic Skills standards continue to take the tests until the standards are met. In 1990,

the standard in 1990. Of those grade 12 students, presumably tested for the last time, 350 did not meet the standard on one or more of the Basic Skills tests.

Following a similar pattern to the results for all students, scores for disadvantaged students dropped between 1989 and 1990, although showing generally higher passing rates than in 1987. In addition, the relative performance of disadvantaged students compared to that of advantaged students improved, with the gap between the two student populations narrowing between 1987 and 1990.

Similarly, score differences between students in urban and non-urban areas narrowed between 1987 and 1990; the difference in the passing rate declined from 15 points in 1987 to 13 points in 1990. Nevertheless, over 53% of the students who do not pass one or more tests attend urban schools.

In Opportunity Schools (schools receiving state assistance in serving large numbers of at-risk students), passing rates followed the same pattern as the results for the state as a whole. The passing rates, however, showed considerable improvement over the four-year period. In 1987, about 56% of the eligible students in the Opportunity Schools passed all three Basic Skills tests. In 1990, more than two thirds of the students passed all three tests.

The four years of comparable data generated by the Basic Skills Testing Program since 1987 provide information useful in evaluating over a decade of state policy focused on basic skills mastery. The trends documented in this report clearly show that, despite a decline over the past year, the vast majority of students have mastered basic skills as measured by the current tests. Also evident is the continued higher failure rates of students in cities and from disadvantaged backgrounds.

Following a statewide evaluation of the Basic Skills Testing Program, and with the approval of the Board of Education, a new test development effort is currently underway. These new tests, while still preserving the original intention of the Basic Skills Testing Program, will seek to reflect more current curriculum thinking and instructional practices. While budget reductions may force a delay in the implementation schedule, the new tests will represent a third opportunity for the Commonwealth to evaluate the basic skills mastery of all students in a more meaningful and relevant manner.

Chapter 1:

Introduction and Background to the Massachusetts Basic Skills Testing Program

Between October 1 and 19, 1990, 169,827 public school students in grades 3, 6 and 9 were tested in reading, writing and mathematics in the fifth annual administration of the Massachusetts Basic Skills Testing Program. The program, mandated by Chapter 188 of the Acts of 1985, was established to identify students who have not achieved mastery of the basic skills needed to participate successfully in regular grade class work in those subjects.

The 1990 test administration was the fourth one completed under a state standard of 65 percent correct in the multiple-choice reading and mathematics tests and a level of skill identified by the Massachusetts Board of Education as the standard for writing. Since 1988, secondary students who have not previously passed any Basic Skills test(s) have been required to take the test(s) until they meet the standard.

Purpose of the Basic Skills Testing Program

To fulfill its purpose of "identifying students who have not achieved mastery of basic skills," the program uses test questions that are easy for most students of average and above-average skill; they discriminate between students who have mastered basic skills and those who have not. The tests do not distinguish more finely among levels of basic skills mastery.

Virtually all students in grades 3, 6 and 9 are tested. Exemptions are limited to:

- students who are incapable of performing ordinary class work in English as determined by the English Language Proficiency Assessment and who have been enrolled in transitional bilingual education programs for fewer than three full years, unless a written request was submitted by the parent that the student be tested;
- special education students if exemptions were requested by the parent either in writing or as part of the TEAM process.

The number of students who were eligible for and exempt from testing in October 1990 is summarized in tables included on pages 6 through 11.

Test Development and Administration

All questions used in the Massachusetts Basic Skills Tests were developed for the program. Objectives were established during 1986-87, based on the advice of committees of teachers and curriculum specialists and results of a school survey. A large pool of possible test questions that measure those objectives was field tested by students in Massachusetts at three different times. From that pool, each year's Basic Skills tests were constructed by selecting test questions that cover the

range of objectives and meet the difficulty level established by the Board of Education. All tests have been reviewed by an equity concerns committee to ensure that they are fair to students of all backgrounds.

The Basic Skills tests were given in October 1990 in individual classrooms by local test administrators, typically classroom teachers. To ensure uniform testing procedures, school personnel attended administration workshops and were provided with manuals giving specific directions for the testing. Grades 10, 11 and 12 students who were required to take the tests followed the same schedule and administration procedures and used the same materials as grade 9 students.

The reading and mathematics tests at grade 3 each contain 40 multiple-choice questions; the grades 6 and 9 tests contain 50 questions. At each grade level, students were required to respond to a writing prompt that was scored holistically by trained raters. On average, testing time for the entire test was about four hours.

Reporting of Results

Basic Skills test results are reported in two primary ways: individual student reports, the focus of the program, are sent to schools and districts in January following testing; aggregate school and district reports are provided in March.

The results for those students in grades 10, 11 and 12 are reported on the student level only. The results are not aggregated for schools or districts, however, because retesting primarily affects individual students. Because of the difficulty of tracking a population of students in the state from year to year, any attempt to provide aggregate or comparative statistics between years of classes could lead to inaccurate and misleading comparisons.

Chapter 188 allows local school districts to set standards higher than those established by the Board. Typically, higher local standards have been used by a small number of school districts. During the past four years, the following numbers of districts selected higher standards as shown:

Standard	Number of Districts			
	1987	1988	1989	1990
70%	14	11	12	11
75%	4	4	2	1
80%	7	5	2	2

Uses of Test Results

The purpose and design of the Basic Skills Testing Program affords differing interpretations of test results, depending on the extent of basic skills problems in any school or district. Most school districts in Massachusetts have a large percentage of students who pass all Basic Skills tests and a very small number who do not. In these districts, the most appropriate response to the results occurs on a case-by-case basis. Non-passing students are evaluated individually and appropriate modifications made to their programs if necessary.

Some schools and districts have a more extensive problem with their students' basic skills mastery. When compared to others, these districts have a relatively small percentage of students passing the tests and substantially larger numbers of students who fail. In some of these situations, it may be appropriate to consider programmatic rather than individual responses to Basic Skills results.

Other factors affecting the interpretation of Basic Skills test results are the grade levels tested and the time of testing in October of each school year. In some instances, students had been enrolled in a school for no more than a month at the time they were tested. At least for these schools, attempting to relate test results to an evaluation of the school's program would be inappropriate.

For example, vocational schools' results are based on testing students who had been previously enrolled in a number of different schools and had typically no more than two weeks of academic instruction at the vocational school. For these schools, the results define the extent of the basic skills problem the school must address. Any evaluation of the school's program, based on these results, would be inaccurate.

The Basic Skills Testing Program helps to establish a level of achievement that all students in Massachusetts should attain. It represents an attempt to ensure that no student will fall below this minimum level of achievement in reading, mathematics and writing. The most legitimate use of test results supports this effort to help students.

Chapter 2: 1990 Results

The following charts present statewide results for the 1990 Basic Skills tests. Comparable statistics are provided for grades 3, 6 and 9. Two different types of statistics are included; each type offers one perspective on students' performance. Both are useful for an improved understanding of Basic Skills results.

The first set of statistics describes the performance of eligible students on each test. Since Chapter 188 states that "the board shall annually test all students" at particular grade levels, the reporting categories account for all students reported as enrolled by the schools and districts. Every student reported as enrolled is accounted for by one of the following four categories:

1. **Exempt:** an enrolled student who was exempted from the test in accordance with program criteria.

All other students are eligible to be tested and their results may show:

2. **Pass:** an enrolled student who scored above the state standard;
3. **Fail:** an enrolled student who scored below the state standard;
4. **Unknown:** an enrolled student who did not take the test or whose test was unscorable.

At each grade level, the results show the distribution of students in each category for each subject tested. These statistics are useful in addressing questions such as "How many sixth grade students have demonstrated mastery of basic skills in each one of the Basic Skills tests?"

This type of information, however, does not provide a total picture of Basic Skills performance. It does not describe how many students have demonstrated mastery of basic skills in all three subject areas. For example, if each test has a ten percent failure rate, it may be important to know whether:

- the same ten percent of students failed all three tests;
- the ten percent failure rate in each subject represents completely different students; or
- the true situation lies somewhere between these extremes.

The second group of statistics — the number of tests passed — provides information relevant to this issue, answering questions such as, "How many sixth grade students have demonstrated mastery of all of the basic skills?"

GRADE 3

BASIC SKILLS TEST RESULTS

1990

READING

Number of Students		
Total Enrollment	65,629	
Total Exemptions	5,757	
Special Education	2,995	
Bilingual	2,762	
Eligible to be tested	59,872	

Students Eligible to be Tested		
	Number	Percentage
Pass	56,500	94.4%
Fail	3,163	5.3%
Unknown	209	0.3%

MATHEMATICS

Number of Students		
Total Enrollment	65,629	
Total Exemptions	5,492	
Special Education	2,743	
Bilingual	2,749	
Eligible to be tested	60,137	

Students Eligible to be Tested		
	Number	Percentage
Pass	55,371	92.1%
Fail	4,536	7.5%
Unknown	230	0.4%

WRITING

Number of Students		
Total Enrollment	65,629	
Total Exemptions	5,798	
Special Education	3,013	
Bilingual	2,785	
Eligible to be tested	59,831	

Students Eligible to be Tested		
	Number	Percentage
Pass	55,195	92.3%
Fail	3,974	6.6%
Unknown	662	1.1%
Blank	114	0.2%
Too Brief	293	0.5%
Off Topic	79	0.1%

Passed Tests		
	Number	Percentage
Passed all 3 tests	50,924	85.3%
Passed 2 tests	5,980	10.0%
Passed 1 test	1,869	3.1%
Passed 0 tests	959	1.6%

- Passing rates on the grade 3 tests ranged from 92.1% to 94.4%.
- 14.7% of the students did not pass one or more tests.

GRADE 6

BASIC SKILLS TEST RESULTS

1990

READING

Number of Students		
Total Enrollment	60,402	
Total Exemptions	4,464	
Special Education	3,009	
Bilingual	1,455	
Eligible to be tested	55,938	

Students Eligible to be Tested		
	Number	Percentage
Pass	49,454	88.4%
Fail	6,061	10.8%
Unknown	423	0.8%

MATHEMATICS

Number of Students		
Total Enrollment	60,402	
Total Exemptions	4,331	
Special Education	2,895	
Bilingual	1,436	
Eligible to be tested	56,071	

Students Eligible to be Tested		
	Number	Percentage
Pass	51,934	92.6%
Fail	3,668	6.5%
Unknown	469	0.8%

WRITING

Number of Students	
Total Enrollment	60,402
Total Exemptions	4,556
Special Education	3,076
Bilingual	1,480
Eligible to be tested	55,846

Students Eligible to be Tested		
	Number	Percentage
Pass	52,387	93.8%
Fail	2,637	4.7%
Unknown	822	1.5%
Blank	251	0.4%
Too Brief	83	0.1%
Off Topic	133	0.2%
No Final Draft	5	0.0%

Passed Tests		
	Number	Percentage
Passed all 3 tests	46,750	83.9%
Passed 2 tests	5,289	9.5%
Passed 1 test	2,421	4.3%
Passed 0 tests	1,240	2.2%

- Passing rates on the grade 6 tests ranged from 88.4% to 93.8%; passing rates were highest in writing and lowest in reading.
- 16.1% of the students did not pass one or more tests.

GRADE 9

BASIC SKILLS TEST RESULTS

1990

READING

Number of Students		
Total Enrollment	59,804	
Total Exemptions	5,195	
Special Education	3,207	
Bilingual	1,988	
Eligible to be tested	54,609	

Students Eligible to be Tested		
	Number	Percentage
Pass	46,910	85.9%
Fail	5,555	10.2%
Unknown	2,144	3.9%

MATHEMATICS

Number of Students		
Total Enrollment	59,804	
Total Exemptions	5,121	
Special Education	3,156	
Bilingual	1,965	
Eligible to be tested	54,683	

Students Eligible to be Tested		
	Number	Percentage
Pass	47,606	87.1%
Fail	4,767	8.7%
Unknown	2,310	4.2%

WRITING

Number of Students		
Total Enrollment	59,804	
Total Exemptions	5,209	
Special Education	3,223	
Bilingual	1,986	
Eligible to be tested	54,595	

Students Eligible to be Tested		
	Number	Percentage
Pass	47,955	87.8%
Fail	3,497	6.4%
Unknown	3,143	5.8%
Blank	1098	2.0%
Too Brief	118	0.2%
Off Topic	94	0.2%
No Final Draft	59	0.1%

Passed Tests		
	Number	Percentage
Passed all 3 tests	42,889	78.8%
Passed 2 tests	5,321	9.8%
Passed 1 test	2,822	5.2%
Passed 0 tests	3,363	6.2%

- Passing rates on the grade 9 tests ranged from 85.9% to 87.8%; passing rates were highest in writing and lowest in reading.
- 21.2% of the students did not pass one or more tests.

Grades 10, 11 and 12 Basic Skills Test Results — 1990

Students who did not meet state standards on a Basic Skills test as ninth graders must continue to take the test until a passing score is achieved. In 1990, this requirement extended to students in grades 10, 11 and 12. Students in these grades who did not pass the tests and students who transferred into Massachusetts public high schools were required to be tested. In 1990, 12,391 students in these categories took the test(s).

The results are reported according to the student's indication whether they had been a student in their present school during the 1989-90 school year. Those who responded that they were in the school last year were most likely students who did not pass the test(s) last year and were taking it again. Students who reported they were **not** in the school last year were more likely to be transfer students who were taking the tests for the first time.

Subject	Students Attending the Same School		Students Not Attending the Same School	
	Number Tested	Percentage Passing	Number Tested	Percentage Passing
Reading	4,810	65.5 %	2,313	84.9 %
Mathematics	3,876	67.3 %	2,222	85.2 %
Writing	2,064	69.1 %	1,930	88.5 %

**Number of students in grades 10, 11 and 12
who have not yet met Basic Skills standards: 3374**

**Number of students in grade 12
who have not yet met Basic Skills standards: 350**

Chapter 3:

The Past, Present and Future of Basic Skills Testing

Over the past eleven years, the Massachusetts Board of Education has overseen a statewide policy directed toward mastery of basic skills for all students. This goal has been pursued under two different policy models, each involving testing as a way to help ensure that all students achieve this mastery.

First, under the Basic Skills Improvement Policy, established in 1979 and in effect until 1985, districts tested students in reading, writing, mathematics and listening at one early elementary, one later elementary and one secondary grade chosen by the district. At the elementary levels, each district developed its own set of objectives, selected a test instrument and determined the passing standard. At the secondary level, each district was required to incorporate state-identified objectives, choose one of several state-approved tests or a state-developed test, and set its own local minimum passing standard for its students.

Because of the local variations in the elements of this testing program, no comparable data were produced across districts or for the state as a whole.

Later, as part of the "Act Improving the Public Schools of the Commonwealth" (Chapter 188) in 1985, the Basic Skills Testing Program was established. This policy switched control of many aspects of basic skills testing from local districts to the state. State objectives in reading, mathematics and writing were defined for grades 3, 6 and 9. State tests and statewide passing standards were developed which allowed uniform reporting of results.

Because of fundamental differences in the character of the two policies, no longitudinal data are available over the eleven years of the state's involvement in basic skills testing. The Basic Skills Testing Program, however, has produced comparable data since 1987. The 1986 tests were a transition year between the two programs and served primarily as field tests for the 1987-1990 tests.

The Basic Skills Testing Program is currently involved in developing new tests. In 1986, items were developed for test administrations through 1990 only, recognizing that both the objectives upon which the test content was based and the level of the passing standard should be reconsidered periodically in order to make the tests as meaningful as possible. In October 1990, the Board of Education approved the development of new basic skills tests that would "reflect more current curriculum thinking and instructional practices" and that would be "somewhat more difficult than the current tests." The original schedule called for a transition year of field testing in 1991 and the administration of new tests in 1992. Budget reductions may result in a delay in the development schedule that could postpone the administration of new tests until 1994.

Since the 1990 test administration marks the end of this phase of Basic Skills Testing, the 1987-1990 test results provide a perspective from which to consider how much progress has been made toward the goal of basic skills mastery for all students. Data from 1987 to 1990 are provided in Appendices A - D. The important trends are highlighted below.

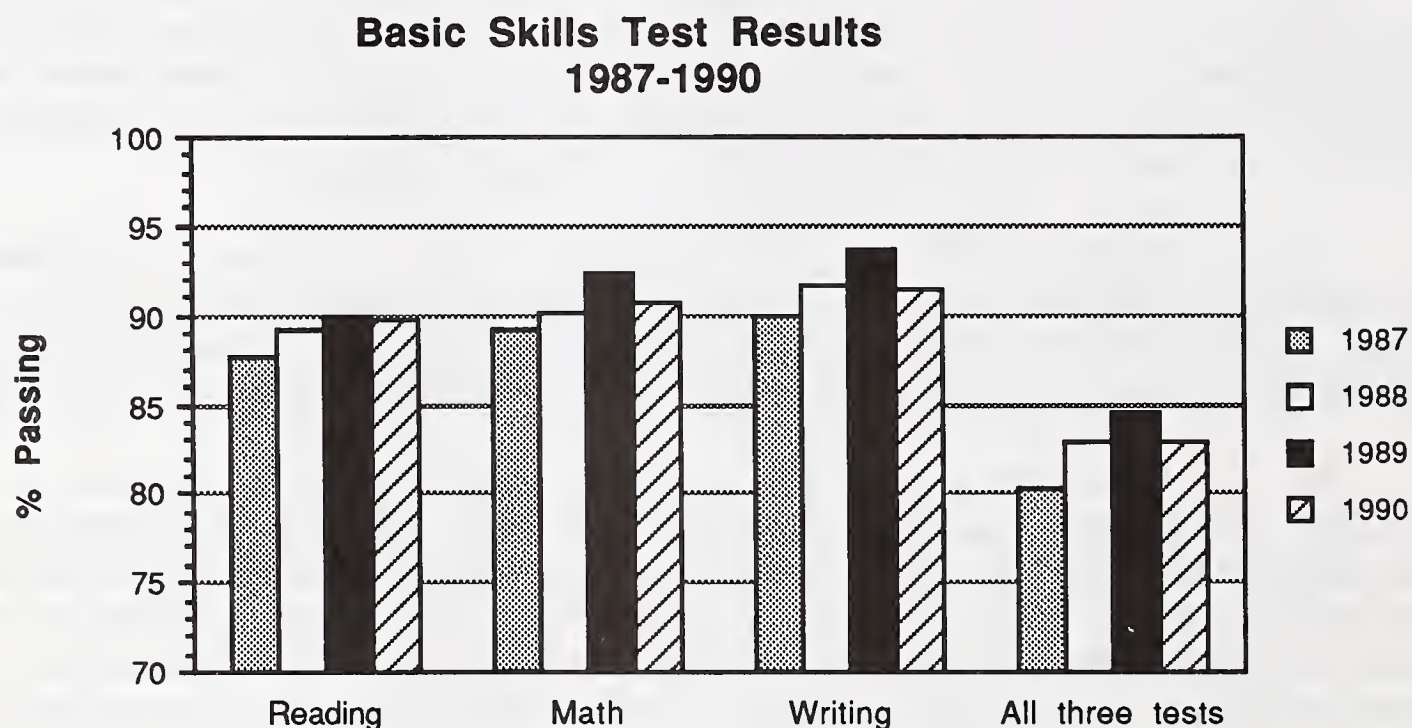
Four-Year Summary: Findings

Three major trends emerge from an analysis of the 1987-1990 results:

1. **The results show a steady, modest improvement in student performance during the first three years of testing; this trend is not evident in the 1990 results. However, almost all scores in 1990 are higher than they were in 1987.**

During the first three years, the passing rates in virtually all grades and subjects went up (see Appendix A). In only four instances (4 out of 24 possible comparisons) did passing rates go down from one year to the next. The largest decline was only .4 percentage points. In contrast, 10 out of 12 passing rates in 1990 were lower than in 1989. The decreases ranged from .1 to 5.0 percentage points.

Aggregating the results across grade levels produces similar results (see Appendix B). The passing rates for each subject increased each year from 1987-1989, but declined somewhat in 1990. The graph below summarizes these data:



Although the trend of the first three years did not continue in 1990, virtually all scores are higher in 1990 than they were in 1987. More students in the state are passing all three Basic Skills tests in 1990 than did in 1987 (see Appendix C). These students represent a larger percentage of those eligible to take the test as well as a larger percentage of the total enrollment in grades 3, 6 and 9 than in 1987. In 1990, 29,264 students did not pass one or more Basic Skills tests. In 1987, the number was just over 33,000 and the enrollment in the three grades tested was smaller.

The percentage of exempted students also increased during the first three years of testing. A higher percentage of the enrollment was exempted each year, starting at 6.9% of the enrollment and ending at 8.6% in 1989. In 1990, the exempted percentage was the same as in 1989.

2. The problem of basic skills mastery among disadvantaged students continues to be substantially greater than among more advantaged students although the difference has been reduced somewhat.

Sharp differences in basic skills performance between particular groups of students have been persistent over the eleven years of state attention to basic skills mastery. Students who have demographic characteristics related to economic disadvantage have consistently performed below those students who do not have these characteristics. Students whose parents have less education, who live in urban areas, who are members of minority groups or who speak a language other than English at home at least half the time have lower passing rates on Basic Skills tests compared to students who do not have these characteristics. The combination of two or more of these characteristics results in even lower passing rates.

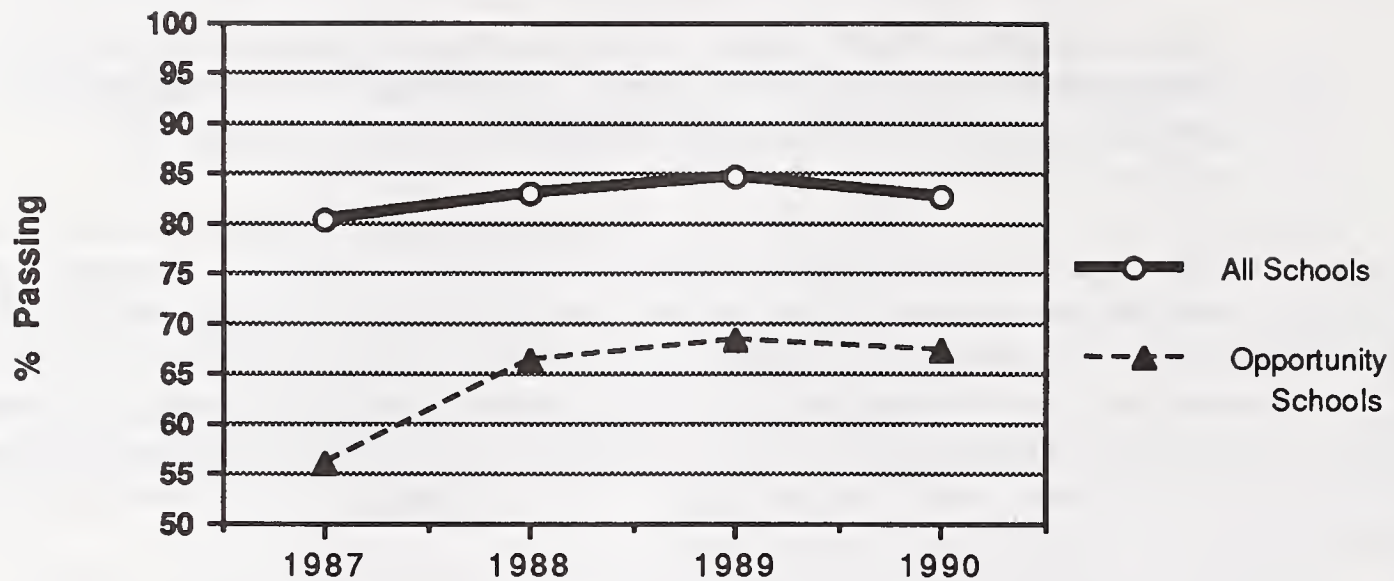
The data from 1987 to 1990 illustrate this finding as well as the first trend described above. The passing rates for most categories of students improved from 1987 to 1989 but dropped somewhat in 1990. As was true for the overall population, scores in 1990 are higher than in 1987 for all groups of students.

The relative performance of disadvantaged students has improved somewhat since 1987 — the gap between advantaged and disadvantaged students has narrowed. For example, in 1987, the passing rate for students whose mothers had less than a high school education was 25 points below that for students whose mothers had graduated from high school. In 1990, the difference between the scores for these two groups was 19 points. For students in urban areas, the difference went from 15 points to 13 in 1990.

The results for students in Opportunity Schools provide a clear example of these trends. Chapter 727 of the Acts of 1987 established a program designed to assist schools serving large numbers of at-risk students. The Department targeted a group of "Opportunity Schools" for special attention. Although they were selected on the basis of their Basic Skills test scores, these schools do serve students with substantial disadvantage.

The test results in the Opportunity Schools followed the same pattern as the results for the state as a whole, as is shown in the graph on page 16 and in Appendix D. Passing rates improved during the first three years and declined somewhat in 1990. In 1987, about 56% of the eligible students passed all three Basic Skills tests. In 1990, more than two thirds of the students passed all three tests.

Opportunity Schools 1987-1990



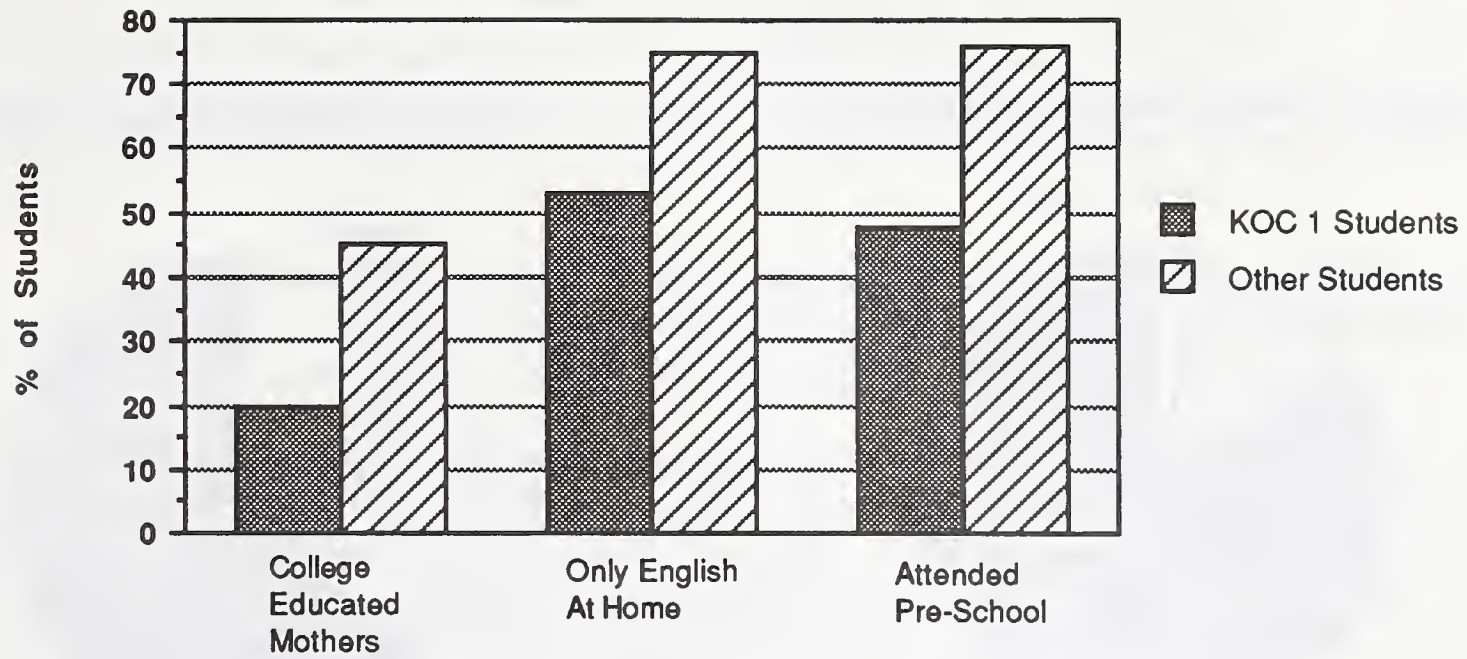
The difference between students in Opportunity Schools and those not in Opportunity Schools in 1987 was 26 points; in 1990, the difference has been reduced to 19 points.

3. **Disadvantaged students are not equally distributed among all schools and districts. Schools that serve a large number of economically disadvantaged students — schools in urban areas — will likely have a substantial percentage of students that have difficulty mastering basic skills.**

As a result, mastery of basic skills becomes an issue that is significant for many urban schools and trivial for most schools in non-urban areas. When a relatively small number of schools serves a disproportionate number of the students who failed one or more tests, the magnitude of the challenge faced by these schools can be overlooked. For example, in some instances, a majority of the students enrolled in a school failed one or more of the Basic Skills tests.

Data for students attending schools in Urban Communities as defined by the Kind of Community classification illustrates these issues. The demographic characteristics of students in KOC 1 are very different from students in non-urban areas. KOC 1 students represent about 40% of the total enrollment at grades 3, 6 and 9. However, 60% of the students whose mothers do not have a high school education and 60% of those students who speak a language other than English at home attend KOC 1 schools. The graph on page 17 compares the background of KOC 1 students with students in non-urban areas.

Background Characteristics Students in Urban Communities



The Basic Skills results are similarly different for KOC 1 students as compared to those of students in other Kinds of Communities. Over 53% of the students who do not pass one or more tests attend KOC 1 schools. As shown below, the percentage of KOC 1 students at each grade level passing all three tests falls well below the passing rate for students attending schools in non-urban areas.

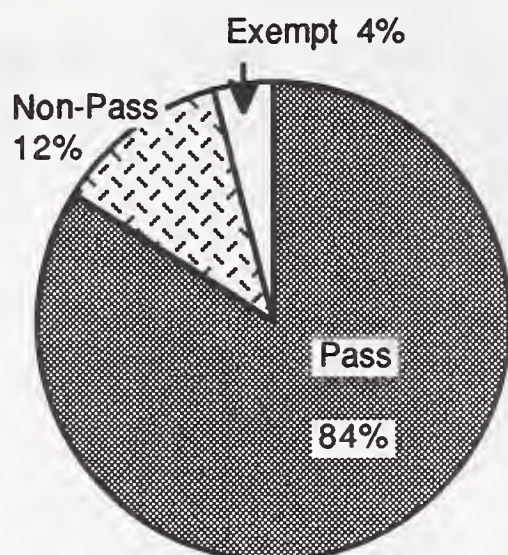
	KOC 1 Students	All Other Students
Grade 3	79%	89%
Grade 9	75%	89%
Grade 9	71%	89%
Total	75%	88%

The impact of these passing rates can be more readily understood in the context of the total enrollment. Passing rates are typically expressed as a percentage of students eligible to take all three tests (students who are not exempt). In some instances, an examination of the relationship of the students who have passed all three tests to the total enrollment can provide more insight into the circumstances the school must address.

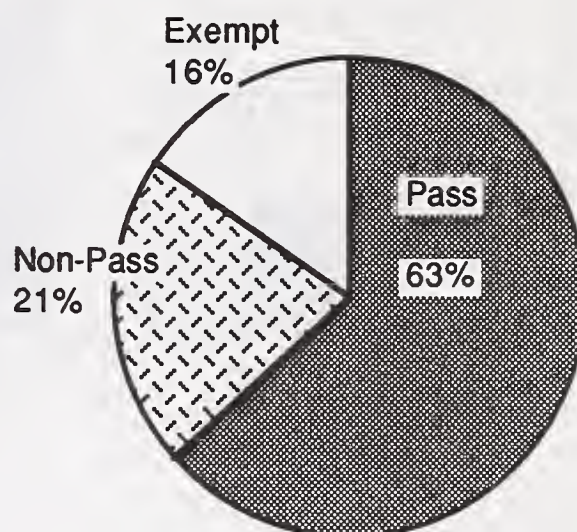
Students who have passed all three Basic Skills tests represent the portion of the school's enrollment that has the skills necessary to participate successfully in the regular grade class work.

The rest of the students enrolled either did not pass one or more tests or were exempt. The graphs below provide comparative profiles of students in KOC 1 schools and students in other Kinds of Communities based on Basic Skills test data.

Students Enrolled in Non-Urban Schools



Students Enrolled in Urban Schools



Four-Year Summary: Interpretation

The consistent pattern of the Basic Skills results from 1987 through 1989 suggests that the basic skills mastery of Massachusetts students did indeed improve during this time. The inconsistency of the 1990 results is more difficult to interpret. One year's results do not signal a clear departure from an established trend. However, the change in direction suggested by the 1990 data should serve as a caution about the basic skills mastery of students in Massachusetts.

At least three possible interpretations exist:

- The population of students tested in 1990 is different from the population of students tested in previous years.
- Some factor or combination of factors systematically affected student performance at all grades and in all subjects.
- Students' mastery of basic skills is, in fact, lower in 1990 than in 1989.

Although the demographic characteristics of students tested in 1990 are not identical to those of students in previous years, the differences do not suggest that a downward shift in the scores

would be expected. In all cases, the differences are small and could, perhaps, counteract each other. For example, the tested population in 1990 represents a slightly higher level of parent education than in 1989 and also a slightly higher percentage of students who speak a language other than English at home at least some of the time. The former circumstance is associated with higher performance and the latter with lower performance. It is possible that the students tested this year differ with respect to circumstances that were not measured as part of the test administration. The available data, however, do not suggest that the tested population in 1990 differs significantly from that of previous years.

Other external factors that may have affected student performance are difficult to identify. Since the tests and test administration have been virtually identical for four years, it is unlikely that variations in them contributed to a change in student performance.

Although the other interpretations do not offer an explanation of the 1990 results, it is unreasonable to conclude, after only one year of lower scores, that the results indicate an actual decline in students' mastery of basic skills. The 1990 results may be a one-year aberration or they may be the beginning of a downward trend, resulting from educational budget cuts or other causes. However, there simply are not enough data yet to know the significance of the observed departure from the previously established pattern of improvement.

APPENDICES

Appendix A: 1987-1990 Basic Skills Results — Grade and Subject

Appendix B: 1987-1990 Basic Skills Results — Subject

Appendix C: 1987-1990 Basic Skills Results — Summary

Appendix D: Opportunity Schools — 1987-1990 Basic Skills Results — Summary

		3				6				9			
		1987	1988	1989	1990	1987	1988	1989	1990	1987	1988	1989	1990
Eligible all 3	Reading	54991	56677	58222	59732	52480	53648	54186	55700	59389	57000	54723	54395
	Pass	93.1	94.8	94.5	94.4	86.2	87.2	88.3	88.4	83.8	85.5	86.7	85.9
	Fail	6.5	4.8	5.2	5.3	12.9	12	11.1	10.8	12.6	10.7	10.1	10.2
	Unknown	0.4	0.5	0.4	0.4	0.8	0.8	0.7	0.8	3.6	3.9	3.3	3.9
Mathematics	Pass	93.4	93.3	94.5	92.1	90.8	91.9	92	92.6	85.9	85.5	88.3	87.1
	Fail	6.2	6.1	5.1	7.5	8.2	7.3	7.3	6.5	10.1	10.2	8.1	8.7
	Unknown	0.5	0.6	0.4	0.4	1	0.8	0.7	0.8	4	4.2	3.6	4.2
	Writing	91.4	93.2	92.9	92.3	89.1	93.8	95.2	93.8	87.4	90	92.8	87.8
Pass All 3	Pass	7.5	5.5	6.2	6.6	9.3	4.7	3.5	4.7	7.3	4.7	2.7	6.5
	Fail	1.2	1.3	1	1.1	1.6	1.5	1.3	1.5	5.3	5.3	4.5	5.8
	Unknown	14.7	12.5	12.3	14.7	21	17.2	15.8	16.1	23.7	21.4	18.3	21.4
	No	85.3	87.5	87.7	85.3	79.1	82.8	84.2	83.9	76.3	78.6	81.8	78.8
Yes	Yes												

1987-1990 Basic Skills Results - Subject

	1987		1988		1989		1990	
	Pass	Eligible	Pass	Eligible	Pass	Eligible	Pass	Eligible
<u>Reading</u>	146669 87.70%	167345	149699 89.20%	167872	150744 89.90%	167656	152864 89.70%	170416
<u>Math</u>	150678 89.90%	167615	151712 90.20%	168175	153999 91.70%	168032	154911 90.70%	170981
<u>Writing</u>	149211 89.20%	167217	154815 92.30%	167689	156878 93.60%	167589	155537 91.40%	170272

1987-1990 Basic Skills Results - Summary

	1987	1988	1989	1990
Total Enrollment	179198	181441	182895	185835
grade 3	59405	61809	63895	65629
grade 6	56220	57866	58885	60402
grade 9	63573	61766	60115	59804
Eligible for all 3				
(% of enrollment)				
grade 3	54991 (92.6%)	56677 (91.7%)	58222 (91.1%)	59732 (91.0%)
grade 6	52480 (93.3%)	53648 (92.7%)	54186 (92.0%)	55700 (92.2%)
grade 9	59389 (93.4%)	57000 (92.5%)	54723 (91.0%)	54395 (91.4%)
Total	166860 (93.1%)	167325 (92.2%)	167131 (91.4%)	169827 (91.4%)
Exemptions				
(enroll-eligible)				
grade 3	4414 (7.4%)	5132 (8.3%)	5673 (8.9%)	5897 (9.0%)
grade 6	3740 (6.7%)	4218 (7.3%)	4699 (7.98%)	4702 (7.8%)
grade 9	4184 (6.6%)	4766 (7.7%)	5392 (8.97%)	5409 (9.1%)
Total	12338 (6.9%)	14116 (7.8%)	15764 (8.6%)	16008 (8.6%)

1987-1990 Basic Skills Results - Summary

	1987	1988	1989	1990
Passed all 3				
(% of eligible)				
grade 3	46888 (85.3%)	49567 (87.6%)	51085 (87.7%)	50924 (85.3%)
grade 6	41483 (79.1%)	44412 (82.8%)	45640 (84.2%)	46750 (83.9%)
grade 9	45318 (76.3%)	44801 (78.6%)	44737 (81.8%)	42889 (78.9%)
Total	133689 (80.2%)	138780 (82.9%)	141462 (84.6%)	140563 (82.8%)
(% of enrollment)				
grade 3	78.90%	80.20%	79.95%	77.60%
grade 6	73.80%	76.80%	77.50%	77.40%
grade 9	71.30%	72.50%	74.40%	71.70%
Total	74.60%	76.50%	77.40%	75.60%
N failed 1 or more				
grade 3	8103	7110	7137	8808
grade 6	10997	9236	8546	8950
grade 9	14071	12199	9986	11506
Total	33171	28545	25669	29264

Opportunity Schools - 1987-1990 Basic Skills Results - Summary

	1987	1988	1989	1990
Total Enrollment	16237	16035	15291	15142
grade 3	6184	6258	6203	6059
grade 6	9374	9088	8450	8493
grade 9	679	689	638	590
Eligible for all 3 (% of enrollment)				
grade 3	4961 (80.2%)	4852 (77.5%)	4613 (74.4%)	4587 (75.7%)
grade 6	7832 (83.6%)	7447 (81.9%)	6876 (81.4%)	6891 (81.1%)
grade 9	649 (95.6%)	597 (86.7%)	554 (87.8%)	501 (84.9%)
	13442 (82.8%)	12896 (80.4%)	12043 (78.8%)	11979 (79.1%)
Exemptions (enroll-eligible)				
grade 3	1223 (19.8%)	1406 (22.5%)	1590 (25.6%)	1472 (24.3%)
grade 6	1542 (16.5%)	1641 (18.1%)	1574 (18.6%)	1602 (18.9%)
grade 9	30 (4.4%)	92 (13.4%)	84 (13.3%)	89 (15.1%)
	2795 (17.2%)	3139 (19.6%)	3248 (21.2%)	3163 (20.9%)

Opportunity Schools - 1987-1990 Basic Skills Results - Summary

	1987	1988	1989	1990
Passed all 3				
(% of eligible)				
grade 3	2840	3437 (70.8%)	3239 (70.2%)	3159 (68.9%)
grade 6	4331	4740 (63.7%)	4577 (66.6%)	4580 (66.5%)
grade 9	341	389 (65.2%)	391 (70.6%)	326 (65.1%)
	7512 (55.9%)	8566 (66.4%)	8207 (68.2%)	8065 (67.3%)
(% of enrollment)				
grade 3	45.90%	54.90%	52.20%	52.10%
grade 6	46.20%	52.20%	54.20%	53.90%
grade 9	50.20%	56.50%	61.30%	55.30%
Total	46.30%	53.40%	53.70%	53.30%
N failed 1 or more				
grade 3	2121	1415	1374	1428
grade 6	3501	2707	2299	2311
grade 9	308	208	163	175
Total	5930 (44.1%)	4330 (33.6%)	3836 (31.9%)	3914 (32.7%)

MASSACHUSETTS DEPARTMENT OF EDUCATION

REGIONAL CENTERS

Eastern Massachusetts Education Service Center
1385 Hancock Street
Quincy, MA 02169
(617)770-7522

Boston-Chelsea Urban Team
1385 Hancock Street
Quincy, MA 02169
(617)770-7556

Central Massachusetts Education Service Center
Beaman Street, Route 140
West Boylston, MA 01853
(508)835-6266

Western Massachusetts Education Service Center
Macek Drive
Chicopee, MA 01013
(413)594-8511

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